

Methodology: Systematic Review and Meta-analysis of the AAC Literature for People with
Autism Spectrum Disorder or Intellectual Disabilities who have Complex Communication
Needs through 2020

Appendix C

Full-text Inclusion/Exclusion Coding Sheet

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Authors Contribution Statements using Contribution Roles Taxonomy (CRediT)

Authors were listed alphabetical order by tier with an explanation of the contributions that are indicated for each tier by using CRediT (Allen et al., 2019).

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Tier 2: Pierson, Wattanawongwan (Project staff)

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Appendix C

Full-text Inclusion/Exclusion Coding Sheet

Variable	(1) Language	(2) Populations	(3) Intervention	(4) Study design	(5) Outcomes
Code in Rayyan	+foreign language	+wrong pop type	+wrong drug	+wrong study design	+wrong outcomes
	<i>Is the study English?</i>	<i>Does at least 1 participant in the study fit this description?</i>	<i>Does the study include an intervention that includes AAC as a communication mode</i>	<i>Is the study design a single-case experimental design (SCED) or between-groups design?</i>	Social communicative outcomes or challenging (problem) behavior
Description	English	One or more participants with, or instructor providing instruction to someone with, an -intellectual delay -developmental disabilit(ies) (e.g. Angelman syndrome, cerebral palsy, autism spectrum disorder, Down syndrome etc. (IDD), such as Autism spectrum disorder (ASD) Intellectual disability (ID) Other developmental disabilities (DD), who have co-occurring complex	Studies must report the results of an augmentative and alternative communication (AAC) intervention. AAC includes unaided (e.g., natural gesture, manual sign, sign language, sign system) and/or aided systems (e.g., from low- mid and high-tech applications) to supplement or replace conventional speech for	SCED: <u>Include</u> Multiple Baseline Design (MBD) or multiple probe design (MPD) Reversal/withdrawal Multi-element alternating treatment design Changing criterion design Complex reversal (above mentioned embedded within others)	Communication behaviors will include production of communication via: - AAC (e.g., speech-output communication aid, speech generating device, exchange-based communication system, sign language) - vocalizations or verbalizations (i.e., spoken words or word approximations) - paralinguistic communication (e.g., pitch, intonation, loudness, inflection)

<p>communication needs (e.g., minimally- or non-verbal) mental retardation cognitive disability severe and profound Down syndrome Microcephaly Apraxia Dyspraxia</p> <p><u>Exclude</u> Participants that had primary diagnoses of physical impairments</p> <p>Participants with developmental disabilities other than ASD, who do not report an IQ score demonstrating an intellectual impairment</p> <p>Persons with sensory impairments</p>	<p>people with complex communication needs (CCN).</p> <p>Aided Communication includes (e.g., non-exchange and exchange-based systems), high-tech (e.g., SGD, speech-generating devices (sometimes referred to as voice output communication aid (VOCA), AAC-dedicated devices, tablet-computer AAC apps, and use of multimodal approaches (more than one AAC mode). Display formats can include grid and/or to visual scene display</p> <p>Include functional communication training (FCT), mention of functional communication that include mention of</p>	<p>Between-group design:</p> <p>(Only the following two types of study designs that are eligible for review under the WWC Group Design Standards)</p> <p>Randomized Controlled Trials (RCTs): use a random process to assign participants or clusters to units. Each unit has a chance of being assigned to every group.</p> <p>Quasi-experimental Designs (QEDs): QEDs compare distinct groups formed using a nonrandom process</p> <p><u>Exclude</u> Case studies Qualitative studies</p>	<p>- gestures and/or signs (e.g. gestures, body language, facial expression, affect).</p> <p>Challenging/problem behaviors will include behaviors that are socially unacceptable and have a history of mediating the actions of others: Behavioral forms include tantrums, repetitive speech/echolalia, physical aggression, screaming, and other disruptive behavior.</p> <p>Include adult outcomes for implementation (e.g., procedural/ treatment integrity, procedural/ treatment fidelity, social validity, feasibility/acceptability)</p> <p><u>Exclude</u> Studies that involved only interaction with a computer and no human-to-human interaction; Studies that involve reporting of only academic responses/behavior or communication</p>
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	complex communication needs (CCN)	comprehension/receptive comprehension DVs ¹
	<u>Exclude</u>	
	Intervention to establish an activity schedule, visual schedule, or task analysis with no apparent AAC applicability.	No social- communicative and/or challenging behavior outcomes addressed in the study.
